



**ADVANCED**  
General Certificate of Education  
January 2013

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**Geography**  
Assessment Unit A2 1  
*assessing*  
Human Interactions and Global Issues  
**[AG211]**

**THURSDAY 17 JANUARY, AFTERNOON**

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**MARK  
SCHEME**

## Foreword

### Introduction

Mark schemes are published to assist teachers and students in their preparation for examinations. Through the mark schemes teachers and students will be able to see what examiners are looking for in response to questions and exactly where the marks have been awarded. The publishing of the mark schemes may help to show that examiners are not concerned about finding out what a student does not know but rather with rewarding students for what they do know.

### The Purpose of Mark Schemes

Examination papers are set and revised by teams of examiners and revisers appointed by the Council. The teams of examiners and revisers include experienced teachers who are familiar with the level and standards expected of 16- to 18-year-old students in schools and colleges. The job of the examiners is to set the questions and the mark schemes; and the job of the revisers is to review the questions and mark schemes commenting on a large range of issues about which they must be satisfied before the question papers and mark schemes are finalised.

The questions and mark schemes are developed in association with each other so that the issues of differentiation and positive achievement can be addressed right from the start. Mark schemes therefore are regarded as a part of an integral process which begins with the setting of questions and ends with the marking of the examination.

The main purpose of the mark scheme is to provide a uniform basis for the marking process so that all markers are following exactly the same instructions and making the same judgements in so far as this is possible. Before marking begins a standardising meeting is held where all the markers are briefed using the mark scheme and samples of the students' work in the form of scripts. Consideration is also given at this stage to any comments on the operational papers received from teachers and their organisations. During this meeting, and up to and including the end of the marking, there is provision for amendments to be made to the mark scheme. What is published represents this final form of the mark scheme.

It is important to recognise that in some cases there may well be other correct responses which are equally acceptable to those published: the mark scheme can only cover those responses which emerged in the examination. There may also be instances where certain judgements may have to be left to the experience of the examiner, for example, where there is no absolute correct response – all teachers will be familiar with making such judgements.

The Council hopes that the mark schemes will be viewed and used in a constructive way as a further support to the teaching and learning processes.

## Introductory Remarks

The assessment objectives (AOs) for this specification are listed below. Students must:

- AO1 demonstrate knowledge and understanding of the content, concepts and processes;
- AO2 analyse, interpret and evaluate geographical information, issues and viewpoints and apply understanding in unfamiliar contexts;
- AO3 select and use a variety of methods, skills and techniques (including the use of new technologies) to investigate questions and issues, reach conclusions and communicate findings.

## General Instructions for Markers

The main purpose of the mark scheme is to provide a uniform basis for the marking process so that all markers are following exactly the same instructions and making the same judgements so far as this is possible. Markers must apply the mark scheme in a consistent manner and to the standard agreed at the standardising meeting.

It is important to recognise that in some cases there may be other correct responses that are equally acceptable to those included in this mark scheme. There may be instances where certain judgements have to be left to the experience of the examiner, for example, where there is no absolute, correct answer.

Markers are advised that there is no correlation between length and quality of response. Candidates may provide a very concise answer that fully addresses the requirements of the question and is therefore worthy of full or almost full marks. Alternatively, a candidate may provide a very long answer which also addresses the requirements of the question and is equally worthy of full or almost full marks. It is important, therefore, not to be influenced by the length of the candidate's response but rather by the extent to which the requirements of the mark scheme have been met.

Some candidates may present answers in writing that is difficult to read. Markers should take time to establish what points are being expressed before deciding on a mark allocation. However, candidates should present answers which are legible and markers should not spend a disproportionate amount of time trying to decipher writing that is illegible.

## Levels of Response

For questions with an allocation of six or more marks three levels of response will be provided to help guide the marking process. General descriptions of the criteria governing levels of response mark schemes are set out on the next page. When deciding about the level of a response, a "best fit" approach should be taken. It will not be necessary for a response to meet the requirements of all the criteria within any given level for that level to be awarded. For example, a Level 3 response does not require all of the possible knowledge and understanding which might be realistically expected from an AS or AL candidate to be present in the answer.

Having decided what the level is, it is then important that a mark from within the range for that level, which accurately reflects the value of the candidate's answer, is awarded.

## General Descriptions for Marking Criteria

Knowledge and Understanding	Skills	Quality of Written Communication	Level
The candidate will show a wide-ranging and accurate knowledge and a clear understanding of the concepts/ideas relevant to the question. All or most of the knowledge and understanding that can be expected is given.	The candidate will display a high level of ability through insightful analysis and interpretation of the resource material with little or no gaps, errors or misapprehensions. All that is significant is extracted from the resource material.	The candidate will express complex subject matter using an appropriate form and style of writing. Material included in the answers will be relevant and clearly organised. It will involve the use of specialist vocabulary and be written legibly and with few, if any, errors in spelling, punctuation and grammar.	3
The candidate will display an accurate to good knowledge and understanding of many of the relevant concepts/ideas. Much of the body of knowledge that can be expected is given.	The candidate will display evidence of the ability to analyse and interpret the resource material but gaps, errors or misapprehensions may be in evidence.	The candidate will express ideas using an appropriate form and style of writing. Material included will be relevant and organised but arguments may stray from the main point. Some specialist terms will be used and there may be occasional errors in spelling, punctuation and grammar. Legibility is satisfactory.	2
The candidate will display some accurate knowledge and understanding but alongside errors and significant gaps. The relevance of the information to the question may be tenuous.	The candidate will be able to show only limited ability to analyse and interpret the resource material and gaps, errors or misapprehensions may be clearly evidenced.	The candidate will have a form and style of writing which is not fluent. Only relatively simple ideas can be dealt with competently. Material included may have dubious relevance. There will be noticeable errors in spelling, punctuation and grammar. Writing may be illegible in places.	1

Section A		AVAILABLE MARKS
<b>Option A: Impact of Population Change</b>		
1	<p><b>(a)</b> They can come up with any two measures for fertility, but it might be anticipated that most will use Crude Birth Rate and Total Fertility Rate. They are asked to describe, so definitions will do. These have to be full for [3], thus make sure that crude birth rate mentions per thousand and crude and the TFR mentions per woman. [1] off for each slip. If they come up with other measures, accept them if they are valid.</p> <p>(2 × [3])</p>	[6]
	<p><b>(b)</b> They do not have to have specific examples, but these might well help give their answers welcome depth if they are used. They can deal with how push and pull factors affect migration in incorporation with the other material rather than separately. Seek understanding for high reward.</p>	[9]
	<b>Level 3 ([7]–[9])</b>	
	<p>A clear understanding of push/pull factors is shown. At least two examples of push/pull factors are discussed including material relating to both push and pull. The candidate clearly shows how the factors affect out- and in-migration. Spatial reference may be present but full marks are available for a sound discussion.</p>	
	<b>Level 2 ([4]–[6])</b>	
	<p>Push/pull factors are clearly understood, their impact on out- and in-migration is demonstrated. The detail may be less or the answer may lack balance or the impacts on migration less clearly shown.</p>	
	<b>Level 1 ([1]–[3])</b>	
	<p>One set of factors only is discussed or the answer fails to show adequate understanding perhaps through being too short.</p>	
<b>(c)</b>	<p>This is about how you establish fertility policies. If the answer is on the impacts of fertility policies, the question is not being answered and if that is all there is, confine to Level 1.</p> <p>They have to use the Resource and their case study:</p> <ul style="list-style-type: none"> <li>• If the Resource is missed, maximum Level 2.</li> <li>• If the case study is missed, Level 1.</li> </ul> <p>Use of the Resource does not require specific mention of the photograph.</p>	
	<b>Level 3 ([11]–[15])</b>	
	<p>There is full coverage, detailed use of Resource 1 plus comprehensive handling of their own case study. There is command shown and good focus on the question's requirement about the difficulties of establishing fertility policies.</p>	
	<b>Level 2 ([6]–[10])</b>	
	<p>The case study is appropriately handled with some detail. Focus is maintained on the question and the language and terminology are acceptable.</p>	
	<b>Level 1 ([1]–[5])</b>	
	<p>Various routes to Level 1 were listed above. Otherwise the answers will be flawed, lacking in length, depth and/or focus.</p>	[15]

- 2 (a) The task is to describe, so evaluation of the views of Malthus and Boserup are not required. They are asked to contrast Boserup to Malthus so the best way would be to put it all together; if they present two stand-alone pieces and do not themselves make the contrasts, Level 2 maximum.
- If only Boserup or Malthus are seen, Level 1.
  - If they mix up the more hopeful Boserup with the more gloomy Malthus, Level 1.

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**Level 3 ([5]–[6])**

The answer is set out effectively so that the question is answered. There is good understanding of the contrasts between the two sets of views.

**Level 2 ([3]–[4])**

Detailed answers, which just fail to identify properly the contrasts will be here along with those which have a better form but lack the depth needed for higher reward.

**Level 1 ([1]–[2])**

Sub-optimal routes to Level 1 were listed above. Otherwise the answers will lack understanding and/or focus perhaps through being too short. [6]

- (b) There are two tasks here. First they have to compare the trends of Indonesia and Nigeria for which [3] are available; maximum [2] if figures are not used. The other [6] in Levels for relating fertility to GDP. As shown with Nigeria and Indonesia, as GDP rises, fertility falls. They can continue to use Nigeria and Indonesia here but do not have to. The command word is 'explain': why does fertility fall? It falls because of materialism, the changing role of women, better availability of family planning, other related factors.

**Level 3 ([5]–[6])**

There is good command and control of the answer. At least a couple of reasons are advanced for the nature of the relationship. Language and terminology are at least adequate.

**Level 2 ([3]–[4])**

There is explanation but it might be limited to just one reason handled well or a greater range which lack some depth.

**Level 1 ([1]–[2])**

Answers which describe rather than explain are here together with those that have not properly covered the ground, through a lack of understanding or perhaps just through being too sketchy.

([3] + [6])

[9]

- (c) They have to do two things: explain why the migration policy was adopted and then evaluate its success. If either is missed, Level 2 maximum.
- This is the migration policy. Those who present an answer on fertility confine to Level 1.
  - No case study, though how could this be so, Level 1.

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**Level 3 ([11]–[15])**

All tasks are completed to a good standard. The reasons for the policy are explained and then its success evaluated. The case study material is detailed and the candidate is on top of the material.

**Level 2 ([6]–[10])**

The answer might have a part lacking but be good in all other aspects. Full answers will not have the command of those receiving higher reward.

**Level 1 ([1]–[5])**

Other than sub-optimal answers, those here will not be able to display a full understanding of their case study's migration policy and its success through lacking understanding and/or detail. [15]

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## Option B: Planning for Sustainable Settlements

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- 3 (a) There is no right answer to this, so allow them to express their own views and assess them on the quality of their argument. They do have to come to a conclusion, Level 2 maximum for those who do not. It does not have to be a yes or a no; an answer which says 'it all depends' can be accepted, providing it is properly argued.

**Level 3 ([5]–[6])**

There is an answer; the argument is solid and the candidate demonstrates command of the material and its language/terminology.

**Level 2 ([3]–[4])**

A fine account can be here if there is no conclusion; otherwise answers will be sound but perhaps lacking a little in depth.

**Level 1 ([1]–[2])**

Flawed answers on sustainable development will be here, demonstrating a lack of understanding and command of the issues. [6]

- (b) The material on Lille shows that such places can be altered but in such a way that their significance can be conserved. We see tramlines going in; they are not there now; cars are allowed but do not dominate, Grand Place is a pleasant open space for people, overlooked always by La Déesse. They might notice that in the latest picture there is an entrance into an underground car park, so modern needs are being met in the ancient setting: the historic buildings remain, pretty much unchanged, down to the cannonballs in some of the old walls.
- They need their own material to help; if none is shown, maximum Level 2.
  - If the Resources are not used, Level 1.
  - They need principles and practice of urban conservation; if either is absent, maximum Level 2.
  - Multiple problems, Level 1.

**Level 3 ([7]–[9])**

A full account, taking material from Lille and also adding their own. The principles and practices requirement is met, even though there does not have to be proper balance. The answer is confident in its use of language and terminology.

**Level 2 ([4]–[6])**

Sub-optimals were shown above; otherwise full answers lack sufficient detail for higher reward.

**Level 1 ([1]–[3])**

Flawed answers are shown and others, including those who think that urban conservation is to do with plants. They may be other ways in which the material is misunderstood, including unfinished answers. [9]

- (c) Watch out for rubric violations. If they take more than three, mark all and reward the top three.
- If they present you with just three stand-alone, self-contained pieces mark  $3 \times [5]$ , but otherwise mark in levels out of [15].
  - It is not necessarily  $3 \times [5]$ , but if only two issues are present, award maximum Level 2; if one, Level 1.
  - No case study, Level 1.

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**Level 3 ([11]–[15])**

Three issues, all handled with some depth and set within their case study. Traffic management matters are highlighted and there is at least adequate use of language and terminology.

**Level 2 ([6]–[10])**

Two issues handled well or three issues with perhaps signs of a lack of focus and/or depth in the handling of the material/case study.

**Level 1 ([1]–[5])**

One issue or, if more, a lack of command and understanding, failing to consider properly traffic management matters.

[15]

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- 4 (a) To some mention of the scene in Santiago, they should bring in their own material dealing with both benefits and problems. Resource 4A shows a busy street lined with shops and full of people. They seem relaxed; some have obviously been shopping, some people are taking the opportunity to provide services such as the shoe shine man. There are trees, nice paving, it is a pleasant place to be. But what about people who need to drive through the centres of towns; what about deliveries; what about the people with mobility problems? Extra material need not be spatially referenced, but can be a deeper discussion, particularly of problems associated with pedestrianisation.
- If there is no use of the Resource, maximum Level 2.
  - If there is only Resource use, Level 1.
  - If either problems or benefits are entirely missing, Level 1.

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**Level 3 ([5]–[6])**

The Resource is added to their own material; the answer has balance in that benefits and problems are both present and well-handled. The candidate displays command of the material.

**Level 2 ([3]–[4])**

There is a worthwhile answer here but maybe there are problems with balance although both positive and negative issues are mentioned. Depth may be an issue.

**Level 1 ([1]–[2])**

Some ways of being here were given above; otherwise the candidate displays a lack of understanding of pedestrianisation, maybe through answering too briefly.

[6]

- (b) Resource 4B presents a series of advantages and disadvantages of using urban ecological footprints, which gives them material to set against their study of places. There are nine bullet points there; do not require all to be separately used, a discussion about good and bad points of these footprints which has some clear reference to the Resource will be fine.
- No Resource use, Level 1.
  - No reference to place, Level 2 maximum.

**Level 3 ([7]–[9])**

The candidate displays good knowledge of urban ecological footprints and is able to use the Resource material to advantage. The answer is illuminated by decent reference to place.

**Level 2 ([4]–[6])**

The depth of understanding may be an issue as might the command of the material relating to place, but the answer remains sound.

**Level 1 ([1]–[3])**

Answers which display inadequate understanding of urban ecological footprints will be here. There may be problems with language and terminology or simply not enough here.

[9]

- (c) Watch out for rubric violations. If they take more than three, mark all and reward the top three.
- If they present you with just three stand-alone, self-contained pieces mark  $3 \times [5]$ , but otherwise mark in levels out of [15].
  - It is not necessarily  $3 \times [5]$ , but if only two issues are present, award maximum Level 2; if one, Level 1.
  - No case study, Level 1.

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**Level 3 ([11]–[15])**

Three issues, all handled with some depth and set within their case study. Land use and planning matters are highlighted and there is at least adequate use of language and terminology.

**Level 2 ([6]–[10])**

Two issues handled well or three issues with perhaps signs of a lack of focus and/or depth in the handling of the material/case study.

**Level 1 ([1]–[5])**

One issue or, if more, a lack of command and understanding, failing to consider properly land use and planning matters.

[15]

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## Option C: Issues in Ethnic Diversity

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- 5 (a) **Territorial disputes** often give rise to ethnic conflict where groups find themselves on the wrong side of a political divide. The situation is often complicated by historical/economic and/or cultural factors. **Human rights abuses** refer to the denial of basic human rights to a section of the community. The degree of abuse ranges from discrimination to actual physical harm. Human rights are guaranteed to an individual or community by international law and their denial to a section of an ethnically diverse society can result in conflict.

Allow **[1] out of [3]** for a definition of each process and the other **[2]** for how each can cause ethnic conflict. Better answers may use examples as that would make it easier but full marks are available to those who provide a full answer without the use of examples.

(2 × [3]) [6]

- (b) Resource 5 details the segregation in some English schools. There are two tasks to do. Their descriptions should make reference to some of the figures in the Resource. They also have to use extra material and this is likely to be in the form of the explanation for this segregation. Some of the reasons they might deal with include the desire to be close to religious or cultural facilities, safety reasons, linguistic barriers and economic reasons. They may include examples to support their answer but full marks are available to those who suggest valid reasons without further spatial reference.
- If there is no extra material used, confine to **Level 1**.
  - If there is no Resource use, confine to **Level 1**.

#### **Level 3 ([7]–[9])**

A thorough answer, which makes good use of the Resource to produce a clear description of the segregation pattern including figures, is at this level. There are valid suggestions for this segregation with adequate extra material. The candidate demonstrates sound understanding and writes in good English.

#### **Level 2 ([4]–[6])**

An answer at this level will still have good material, but the depth and detail will be less than the previous level. There may be inadequate use of the Resource or the reasons for the segregation are less well developed. English is of good quality.

#### **Level 1 ([1]–[3])**

An answer at this level will have serious weaknesses in terms of detail, depth and accuracy. There may also be errors in English. [9]

(c) There are several things to do here. They need to discuss why ethnicity is best defined by a combination of primary and secondary factors. They must also make reference to places in their answers. The specification lists race, nationality, language, religion and perceived ethnic identity as primary factors, and social status, residential concentration, age, gender and caste as secondary factors. There is no prescribed number of primary and secondary factors they have to use but they must choose more than one in each case.

- If they do not deal with the 'combination' aspect of the question and simply discuss primary and secondary factors award from **Level 2 maximum**.
- If they only look at one primary and one secondary factor, award from **Level 1 maximum**.
- If they only look at primary or secondary factors, award from **Level 1 maximum**.
- No reference to places/multiple errors, award from **Level 1 only**.

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**Level 3 ([11]–[15])**

There is good detail here. The candidate addresses all aspects of the question competently. The detail on primary and secondary factors is accurate, the examples used are relevant and the answer is written in good English.

**Level 2 ([6]–[10])**

Apart from the situation described above, this is still a good answer and the candidate is still in control of the topic. The main reason for awarding from this level is lack of depth and/or detail. Use of English is acceptable.

**Level 1 ([1]–[5])**

The sub-optimal situation above is at this level. Otherwise, a Level 1 answer will most likely be lacking in relevant accurate detail. There may also be grammatical errors.

[15]

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- 6 (a) (i) They do not need to know anything about Sudan other than what is available in the Resource. Therefore, any plausible reasons are acceptable but expect to see the oil reserves as a major cause for international intervention. Others include economic rivalry between China, which has recently become a major importer of oil from this region, and the USA. The resource also mentions the strong links that have been forged between Christian groups in the USA and several ethnic groups in South Sudan.

Do not expect long answers here as there are only 3 marks available for each reason but make sure they have a plausible reason and some development of the answer.

(2 × [3])

[6]

- (ii) Separation along ethnic lines is often the aim of one group in conflict situations such as that in Sudan. The task here is to discuss the extent of their agreement with this outcome. They have to use the Resource to help them, so there must be additional material in their answer. In some cases separation along ethnic lines will result in the cessation of violence and a more peaceful outcome. However, it is usually more complex than this. South Sudan does have considerable oil wealth but its economy is very fragile. The oil pipelines and refineries are in rival Sudan. There are claims and counter-claims of atrocities from both sides and the issue of minorities ending up on the 'wrong side' of the divide. All of this is available from the Resource but they have to bring in extra material to present a balanced discussion that will allow them to make a reasoned discussion of the statement.
- No clear statement of their view of the statement, **Level 2 maximum**.
  - No additional material, **Level 1 maximum**.
  - No use of the Resource, **Level 1 maximum**.

#### **Level 3 ([7]–[9])**

This is a thorough answer that demonstrates sound understanding of separation/territorial division as an outcome of ethnic conflict.

Discussion is based around rigorous Resource use and the extra material is well integrated into the answer. There is balanced judgement and use of English is good.

#### **Level 2 ([4]–[6])**

The sub-optimal situation described above is here. Apart from this, answers at this level are still adequate but lacking some depth and detail. Discussion may still be present but it is more superficial than at the previous level. Use of English is acceptable.

#### **Level 1 ([1]–[3])**

Apart from the sub-optimal situations described above, an answer at this level is seriously flawed by inaccuracies or irrelevant material.

There may also be grammatical errors.

[9]

- (b) This is their urban case study. They will have to describe the ethnic diversity in their chosen city and then evaluate the role of any three of the following processes in maintaining its ethnic diversity. The specification lists segregation, pluralism, multiculturalism and discrimination as processes maintaining ethnic diversity.

**Segregation:** The physical separation or segregation of ethnic groups maintains ethnic diversity because it minimises the opportunities for social interaction. Segregation can evolve through economic or social processes or

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for security. The net result is that the various groups live separate lives with little understanding of the cultural norms of other groups. In British cities, including Belfast, there are enclaves of ethnic groups with their own services, schools, places of worship and recreation.

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**Pluralism:** Due to increased international migration and globalisation most countries have ethnic minorities. Some countries such as the USA are populated almost entirely by immigrants and their descendants. In the UK, London has over 200 linguistic groups and 30% of its population is non-white. The extent to which pluralism maintains ethnic diversity depends on how readily the various groups integrate and on the prevailing policies regarding integration in their new country.

**Multiculturalism:** In many ethnically diverse countries the prevailing political ideology permits ethnic groups to maintain their cultural, religious and linguistic traditions. This has often led to clusters of near homogeneous neighbourhoods in cities with their own services, places of worship etc. These neighbourhoods often have clearly defined boundaries and can be intimidating or no go areas for those of a different ethnicity. This reduces the opportunities for mixing and integration.

**Discrimination:** In many ethnically diverse societies a minority group is actively discriminated against. This can take the form of unfair allocation of housing or jobs or the minority group may not enjoy the same freedom of religious, political or cultural expression as the ruling population. Discrimination maintains ethnic diversity because it confines one sector of the population to an inferior niche in society and it also foments anger and hostility in the underprivileged group.

As always in case study questions there must be detail of place. If anyone answers on all four processes, mark all of them but award the three highest scoring processes.

- If there are only two processes discussed and evaluated, confine to **Level 2 maximum**.
- If there is no evaluation and three processes are simply discussed, confine to **Level 2 maximum**
- If there is no case study or the answer is at the wrong scale, confine to **Level 1**.
- If only one process is discussed and evaluated or there are multiple errors, confine to **level 1**.

### **Level 3 ([11]–[15])**

Three processes are discussed and linked clearly to case study detail. There is good understanding and evaluation of how their chosen processes have maintained ethnic diversity. The answer is well written.

### **Level 2 ([6]–[10])**

At least two processes are discussed but there is less detail and depth throughout or one process is only dealt with in a superficial manner. There is still adequate case study detail but evaluation of the role of the chosen processes in maintaining ethnic diversity is absent. The answer is more descriptive with less emphasis on the question set. English is still good.

### **Level 1 ([1]–[5])**

This answer is lacking in detail and depth on all aspects or there may be incorrect information. Use of English may be flawed.

[15]

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**Section A**

60

**Section B**  
**Global Issues**

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- 7 (a) Award [1] for identification of a secondary gaseous pollutant (ozone, PANs) and the remaining [3] for explanation as to why an increase in this pollutant would cause concern to environmentalists. There are no significant direct emissions of secondary gaseous pollutants into the atmosphere; rather, they are formed by chemical reactions between combinations of other pollutants. If only a simple statement/description is presented, or if the 'increase' aspect is neglected, a maximum of [2] may be awarded. Detailed, valid comments may be awarded a maximum of [3]. [4]
- (b) A clear description of an appropriate technique used to process or analyse the primary data collected should be given, along with comment on the conclusions reached through its application.

**Level 3 ([5]–[6])**

An appropriate processing/analysis technique is described in detail. Valid comment on the conclusions reached is presented. Terminology is good.

**Level 2 ([3]–[4])**

An appropriate processing/analysis technique is described with some detail. Some comment on the conclusions reached is presented, although depth and detail may be restricted. Terminology may be restricted.

**Level 1 ([1]–[2])**

An inappropriate processing/analysis technique may be described, or the comments presented may not relate to air pollution. Alternatively, an appropriate technique may be described in a cursory manner. Comment on the conclusions reached may be absent, invalid, or cursory. [6]

- (c) The candidate is asked to discuss the extent to which they agree with the given statement. Thus, reference to the statement is an integral expectation of the response.

MEDCs have more abundant technology/finances/knowledge/political power to enable them to offset the implications associated with global warming/climate change. For example, they can seek for solutions more readily and educate their populations as to how to apply them. MEDCs may also apply techno-fixes with greater ease in order to deal with actual impacts of climate change/global warming. LEDCs are arguably at the mercy of MEDCs and their development may be compromised as a result.

**Level 3 ([14]–[20])**

The candidate makes strong and appropriate reference to the statement. The extent to which the candidate agrees with the statement is made explicit. Each element of the statement is addressed: MEDCs; LEDCs; capacity to offset climate change/global warming; capacity to adapt to the impacts of climate change/global warming; the extent to which the candidate agrees with the statement. A high level of detail is given.

**Level 2 ([7]–[13])**

The candidate makes some appropriate reference to the statement. There is some, albeit restricted, clarification as to the extent to which the candidate agrees with the statement. At least three elements of the statement are addressed: MEDCs; LEDCs; capacity to offset climate change/global

warming; capacity to adapt to the impacts of climate change/global warming. Details may be restricted.

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**Level 1 ([1]–[6])**

The candidate may make limited appropriate reference to the statement. The candidate may not clarify their position in relation to the statement. Either each of the elements of the statement (MEDCs; LEDCs; capacity to offset climate change/global warming; capacity to adapt to the impacts of climate change/global warming) may be addressed in a cursory manner only, or a number of elements neglected or mishandled. Details may be very restricted.

[20]

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- 8 (a) Air, water and soil pollution will all result with profound impacts on the ecology including the population. Cancers, emotional problems, impaired fertility, and birth abnormalities will increase in number and there may be a number of direct deaths. Vegetation will be directly affected also. Two potential impacts should be outlined. Maximum [2] each. [4]

- (b) A clear description of an appropriate technique used to process or analyse the data should be given, along with comment on the conclusions reached through its application.

**Level 3 ([5]–[6])**

An appropriate processing/analysis technique is described in detail. Valid comment on the conclusions reached is presented. Terminology is good.

**Level 2 ([3]–[4])**

An appropriate processing/analysis technique is described with some detail. Some comment on the conclusions reached is presented, although depth and detail may be restricted. Terminology may be restricted.

**Level 1 ([1]–[2])**

An inappropriate processing/analysis technique may be described, or the comments presented may not relate to nuclear energy. Alternatively, an appropriate technique may be described in a cursory manner. Comment on the conclusions reached may be absent, invalid, or cursory. [6]

- (c) Benefits of the development of nuclear energy may include, for example: high energy output which may permit closure of the energy gap; relative political independence from oil producing countries; low emissions, thus addressing the concerns about global warming/climate change; small amounts of waste. The candidate is asked to discuss the arguments supporting increased use of nuclear energy in the British Isles and outline their position in relation to this evidence. Explicit reference to the British Isles should be made.

**Level 3 ([14]–[20])**

Each element of the question is strongly addressed: discussion of arguments supporting increased use of nuclear power in British Isles; explicit reference to British Isles; clarification of candidate's position in relation to the evidence. Comments are well-developed and with good use of terminology.

A high level of detail is given.

**Level 2 ([7]–[13])**

Each element of the question (discussion of arguments supporting increased use of nuclear power in British Isles; explicit reference to British Isles; clarification of candidate's position in relation to the evidence) is addressed, albeit in an unbalanced fashion. Comments may be underdeveloped and terminology/details may be restricted.

**Level 1 ([1]–[6])**

More than one element (discussion of arguments supporting increased use of nuclear power in British Isles; explicit reference to British Isles; clarification of candidate's position in relation to the evidence) may have been neglected. Comments may be cursory only, perhaps lacking validity or detail validity.

Use of terminology may be poor.

AVAILABLE MARKS

30

- 9 (a) Technologically advanced inputs is an umbrella term covering a whole range of modern farming practices ranging from artificial fertilisers, pesticides, herbicides and genetically modified crops. They are an essential part of agribusiness. They have many potential benefits to agriculture including increased yields, more profits, cheaper food in shops, increased shelf life of many products and they could help farming in LEDCs especially in areas of drought etc. They may also have potentially damaging impacts including a reduction of biodiversity, potential health risks and pollution of groundwater and rivers. For 4 marks a long answer is not required. Look to see a clear understanding of technologically advanced inputs and a brief description of one impact. [4]

- (b) A clear description of an appropriate technique used to process or analyse the data should be given, along with comment on the conclusions reached through its application.

**Level 3 ([5]–[6])**

An appropriate processing/analysis technique is described in detail. Valid comment on the conclusions reached is presented. Terminology is good.

**Level 2 ([3]–[4])**

An appropriate processing/analysis technique is described with some detail. Some comment on the conclusions reached is presented, although depth and detail may be restricted. Terminology may be restricted.

**Level 1 ([1]–[2])**

An inappropriate processing/analysis technique may be described or the comments presented may not relate to agricultural change. Alternatively, an appropriate technique may be described in a cursory manner. Comment on the conclusions reached may be absent, invalid or cursory. [6]

- (c) This is their chosen global issues debate. They need to use their material to answer the question set. Do not over-reward a candidate who does not follow the exact requirements of the question. They will need to discuss GM crops and discuss whether the benefits from their use outweigh the potential environmental damage they may cause. They may call upon their studies of Boserup and Malthus here. Some of the points they might discuss include – the increase in land given over to biofuels, increase in demand for food supplies from emerging countries such as China and India, loss of cultivated land due to changes associated with global climate change and increased demand for food caused by growing world population. They then need to demonstrate their grasp of the evidence that claims GM crops pose significant potential environmental threats. They might mention anything from health risks, contamination of non-GM crops, threats to biodiversity etc. They must make reference to places in their answer. This must be more than simply name-dropping of places. They need evidence from places in some detail. Finally they must clarify their position regarding the statement.

There are four things to do here:

- discuss the benefits of GM crops;
- discuss the potential environmental damage from GM crops;
- make reference to places; and
- reach a decision.

If one of these four is missing, confine to **Level 2**.

If two or more of the four are missing, confine to **Level 1**.

AVAILABLE  
MARKS

**Level 3 ([14]–[20])**

At this level the candidate has provided a balanced answer. The issues of increased food prices/shortages are discussed competently. The controversy surrounding GM crops is dealt with in a measured and informed manner. The candidate demonstrates a sound knowledge of the evidence supporting GM crops and uses facts and examples to good effect. There is detailed reference to places. The potential damage to the environment is discussed thoroughly before a final decision in relation to the statement is made. The answer is well written using appropriate terminology and showing very good written communication skills.

AVAILABLE MARKS

**Level 2 ([7]–[13])**

Apart from the situation above, this is still a competent answer addressing all aspects of the question but the level of depth and detail is less than above. The candidate has less knowledge of the evidence supporting GM crops or their potential damage to the environment. Alternatively, she/he may not have demonstrated adequate balance in reaching a decision on the statement. There are references to places but there is less detail than at the previous level. Nevertheless, there is still adequate understanding shown and the main difference between a Level 2 and a Level 3 answer is the depth and detail used. Quality of language is good.

**Level 1 ([1]–[6])**

Apart from the situation above, an answer at this level is seriously flawed either in accuracy, depth and or detail. The candidate is not in control of the topic. The answer is short, showing only partial understanding or knowledge. Written English may be flawed.

[20]

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10 (a) The term carrying capacity in relation to tourism refers to the maximum number of tourists that can be comfortably supported in that resort. An increase in tourist numbers would adversely affect the tourist potential of the area and/or cause environmental damage. Carrying capacity is a subjective concept and will vary between types of tourist activity and it is also dependent on personality traits of the tourists themselves. Some tourist activities such as hillwalking will typically have a lower carrying capacity than beach holidays. For 4 marks look for an understanding of the two elements, namely the effect on tourist potential and the potential environmental effects. [4]

AVAILABLE MARKS

(b) A clear description of an appropriate technique used to process or analyse the data should be given, along with comment on the conclusions reached through its application.

**Level 3 ([5]–[6])**

An appropriate processing/analysis technique is described in detail. Valid comment on the conclusions reached is presented. Terminology is good.

**Level 2 ([3]–[4])**

An appropriate processing/analysis technique is described with some detail. Some comment on the conclusions reached is presented, although depth and detail may be restricted. Terminology may be restricted.

**Level 1 ([1]–[2])**

An inappropriate processing/analysis technique may be described or the comments presented may not relate to tourism change. Alternatively, an appropriate technique may be described in a cursory manner. Comment on the conclusions reached may be absent, invalid or cursory. [6]

(c) This is their chosen global issues debate. They need to use their material to answer the question set. Do not over-reward a candidate who does not follow the exact requirements of the question. They will need to discuss ecotourism and explain the advantages and disadvantages of this type of development before reaching a decision as to whether ecotourism can truly exist. Some of the points they might discuss include – the increased money that comes into a region as result of any form of tourism development, the increase in demand for locally produced goods, the potential for jobs etc. for local people and all of this set in a framework of environmentally sensitive developments. On the other side any form of tourism inevitably changes a region and there is always a risk of damage to sensitive environments. There are also issues relating to leakage of tourist revenue out of the region and the threat of forced removal of tribal groups from their traditional homelands as well as the issue of 'greenwashing'. There is not a definitive list of issues that they have to discuss but they must demonstrate an understanding of both sides of the argument before finally making a decision. They will need to make reference to actual examples of places to support their answer. This must be more than simply name-dropping of places. They need evidence from places in some detail.

There are four things to do here:

- discuss the advantages/positive views of ecotourism;
- discuss the disadvantages/negative views of ecotourism;
- make reference to places; and
- reach a decision.

If one of these four is missing, confine to **Level 2**.

If two or more of the four are missing, confine to **Level 1**.

**Level 3 ([14]–[20])**

At this level the candidate has provided a balanced answer. The issues surrounding ecotourism are discussed competently. The candidate has facts and examples and these are used to good effect. There is detailed reference to places. The opposing issues are discussed thoroughly before a final decision is made regarding the statement given. The answer is well written using appropriate terminology and showing very good written communication skills.

AVAILABLE MARKS

**Level 2 ([7]–[13])**

Apart from the situation above this is still a competent answer addressing all aspects of the question but the level of depth and detail is less than above. There may be fewer examples or the candidate may not have demonstrated adequate balance in reaching a decision on the statement. There are references to places but there is less detail than at the previous level. Nevertheless, there is still adequate understanding shown and the main difference between a Level 2 and a Level 3 answer is the depth and detail used. Quality of language is good.

**Level 1 ([1]–[6])**

Apart from the situation above an answer at this level is seriously flawed either in accuracy, depth and or detail. The candidate is not in control of the topic. The answer is short, showing only partial understanding or knowledge. Written English may be flawed.

[20]

30

**Section B**

30

**Total**

90